

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20591

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In the matter of the petition of

JOE BRIGHAM, INC.

for an exemption from Sections
133.33(d) and (e) and 133.45(d) of
Title 14, Code of Federal Regulations

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Regulatory Docket
No. 28991

DENIAL OF EXEMPTION

By letter dated August 7, 1997, Mr. Raymond G. Newcomb, President, Joe Brigham, Inc. (JBI), 720 Clough Mill Road, Pembroke, New Hampshire 03275, petitioned the Federal Aviation Administration (FAA) on behalf of JBI for an exemption from Sections 133.33(d) and (e) and 133.45(d) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption, if granted, would allow JBI to operate a Bell Model UH-1B helicopter (Huey) (Registration No. N204JB, Serial No. 63-13088), a restricted-category helicopter, in external-load operations over congested areas, subject to an approved Congested Area Plan (CAP).

The petitioner requests relief from the following regulations:

Section 133.33(d) prescribes, in pertinent part, that the holder of a rotorcraft external-load operator certificate may conduct, in rotorcraft type certificated under and meeting the requirements of 14 CFR part 27 or part 29 (which specify airworthiness standards for normal and transport category rotorcraft, respectively), including the external-load attaching means, rotorcraft external-load operations over congested areas if those operations are conducted without hazard to persons or property on the surface and comply with the following:

- (1) The operator must develop a plan for each complete operation, coordinate this plan with the FAA Flight Standards District Office (FSDO) having jurisdiction over the area in which the operation will be conducted, and obtain approval for the operation from that FSDO.

The plan must include an agreement with the appropriate political subdivision that local officials will exclude unauthorized persons from the area in which the operation will be conducted, coordination with air traffic control, if necessary, and a detailed chart depicting the flight routes and altitudes.

- (2) Each flight must be conducted at an altitude and on a route that will allow a jettisonable external load to be released and the rotorcraft landed in an emergency without hazard to persons or property on the surface.

Section 133.33(e) prescribes, in pertinent part, that except as provided in Section 133.45(d), the holder of a rotorcraft external-load operator certificate may conduct external-load operations, including approaches, departures, and load positioning maneuvers necessary for the operation, below 500 feet above the surface and closer than 500 feet to persons, vessels, vehicles, and structures, if the operations are conducted without creating a hazard to persons or property on the surface.

Section 133.45(d) prescribes that no person may conduct an external-load operation under this part with a rotorcraft type certificated in the restricted category under 14 CFR Section 21.25 over a densely populated area, in a congested airway, or near a busy airport where passenger transport operations are conducted.

The petitioner supports its request with the following information:

The petitioner states that JBI owns three Bell Model 206 (Bell 206) helicopters certificated under part 27 and one restricted-category Huey, and each year JBI performs more than 260,000 "lifts." The petitioner notes that JBI and its predecessor companies have conducted operations under part 133 since 1984.

The petitioner indicates that each of its Bell 206 helicopters is limited to an external-load capacity of 1,000 pounds, and air conditioning units, which JBI often lifts, regularly exceed 1,000 pounds. Therefore, the petitioner states that on December 26, 1990, JBI purchased the Huey, which is certificated to lift 4,500 pounds and will be used to lift items that exceed the external-load capacity of the Bell 206 helicopter. According to the petitioner, JBI voluntarily limits its Huey to 3,000 pounds of lift to increase the margin of safety. The petitioner asserts that there are no helicopters in New England certificated under part 27 or part 29 with a lift capacity of 3,000 pounds.

The petitioner states that restricted-category helicopters

are not permitted to conduct external-load operations in congested areas. The petitioner also states there is no definition of "congested area" in the regulations or underlying statutes. According to the petitioner, the definition of congested area has varied among FAA regions and congested area determinations are subjective judgments made on a case-by-case basis. According to the petitioner, JBI recently has been denied approval for certain operations JBI would have conducted in areas JBI believes would not be considered congested areas.

According to the petitioner, when part 133 (which limited external-load operations to helicopters certificated in the standard category) was adopted, there was little or no experience with restricted-category helicopters in external-load operations. The petitioner asserts that in the last 15 years the Huey has demonstrated a safe operational history, particularly in external-load operations. The petitioner further asserts that between 1983 and 1997, part 133 operations with helicopters certificated in the restricted category contributed to only one-fourth of the total accidents experienced by such operations and less than one-half of accidents experienced by helicopters certificated in the standard category. The petitioner states that JBI has had only one accident with its Huey while conducting external-load operations. The petitioner states that the accident was a gearbox failure, the emergency plan worked as predicted with no injuries, and the helicopter was repaired easily.

The petitioner states that an exemption, if granted, would provide an adequate level of safety because JBI would operate under an approved CAP. In addition, the petitioner indicates that safety would be maintained because of JBI's experience, safety record, and "repair station status." The petitioner further states that the relief sought by JBI would provide a greater degree of safety than the unregulated operations of restricted-category aircraft by Government organizations.

The petitioner asserts that every proposed operation over a congested area would require JBI to file a CAP with the FSDO having jurisdiction over the affected area, and the FSDO must find that each operation would not result in an undue hazard. The petitioner states that it would expect the FSDO to approve an operation over an area with sufficient emergency landing areas and crowd control measures. In support of its argument, the petitioner included the following statement from FAA Order No. 8700.1:

The Federal Aviation Administration (FAA) has determined that external-load operations are in the public interest and do not inherently pose an undue risk to the public. Hazards are prevented by risk

management procedures such as a CAP, and by frequent surveillance.

According to the petitioner, JBI holds Repair Station Certificate No. FTYR033E with Operations Specifications covering Bell 206 and Huey airframes, and Allison 250 series and Lycoming T-33-L-11D powerplants. Therefore, the petitioner indicates that JBI is uniquely qualified to maintain its Huey in "tip-top" condition and proposes as a condition to the exemption to retain its repair station certificate during the period of validity of the exemption.

The petitioner states, regarding maintenance performed on the Huey, in addition to complying with all military work orders, technical bulletins, airworthiness directives, and service bulletins, JBI has replaced all military avionics with modern civilian systems, including dual very high frequency communication radios with a switching panel, a transponder with an encoding altimeter, global positioning systems, and company radios using frequency modulation. Furthermore, although the FAA has mandated inspection of the main gearbox every 1,400 cycles, JBI conducts inspections of the main gearbox every 1,000 cycles and replaces the gears instead of reconditioning old gears. In addition, the petitioner states that JBI has replaced all windows, repainted the aircraft and main tail rotors with high-visibility paint schemes, and added a high-visibility white strobe light system to prevent rear collisions.

Regarding JBI's pilots, the petitioner indicates that each pilot holds either a commercial pilot or airline transport pilot certificate with helicopter ratings, and each pilot has a good safety and enforcement record. The petitioner states that JBI requires all of its pilots to attend an annual recurrent ground and flight-training session at the Bell Helicopter Flight Training Academy (Bell), "over and above FAA mandatory Air Taxi Certified Training requirements." The petitioner proposes as a condition to the exemption that JBI continue requiring its pilots to attend the annual recurrent training with Bell.

The petitioner states that an exemption, if granted, would be in the public interest because external-load operations offer a great advantage because those operations can be conducted in a short period of time, when businesses are not open, and when the public is not likely to congregate. The petitioner states that the work can be completed in a matter of minutes, rather than in hours or days, and at a lesser expense to the contractor than when using a ground-based crane. The petitioner indicates that on occasion, a ground-based crane is not a viable alternative because the crane does not have the necessary "reach."

In support of its petition, JBI included copies of its

operating certificate, repair station certificate, and Operations Specifications.

Although the petitioner requested that action on its petition not be delayed for publication in the Federal Register, the FAA found that the petition, if granted, would set a precedent. Therefore, to permit the public to comment on the petition, a summary of this petition was published in the Federal Register on October 2, 1997 (62 FR 51713). The FAA received 123 comments in favor of a grant of exemption and 1 comment in opposition. Most comments were from various construction companies, local utility providers, units of Government, and other entities, mainly in New England.

The FAA received 75 comments regarding the safety of JBI's operations. Several commenters affirm JBI's focus on safety, and many commenters are impressed with JBI's "safety briefings" conducted before each lift. The FAA received over 60 comments from persons attesting to the experience and professionalism of JBI. Commenters express satisfaction with JBI's services and state that JBI conducts a safe, competent, and dependable operation. One commenter states that JBI provides the only helicopter service that he trusts completely.

The FAA received 28 comments confirming the high quality of maintenance that JBI provides for its helicopters. Several commenters note that JBI operates a certificated repair station as an indication that JBI's helicopters are maintained in a high-quality manner. Some commenters note that the condition of JBI's helicopters is above what is considered "airworthy."

Forty-four commenters prefer using a helicopter instead of a ground-based construction crane for certain operations because of specific work conditions. Several commenters state that helicopters are necessary to reach areas where cranes cannot reach, such as far within the roof area of a large shopping complex or atop a high tower. Other commenters state it is impossible for a crane to reach remote sites because of mountainous terrain, whereas a helicopter has no difficulty reaching those areas. Other commenters state that operating a crane is difficult in confined work spaces such as city streets and parking lots, and one commenter states that cranes are difficult to transport because of highway regulations. Many commenters indicate that using a helicopter instead of a crane to perform certain lifts is in the interest of public safety because the speed of using a helicopter reduces the amount of time the public is exposed to the operation, thereby reducing the risk. In addition to other comments related to safety, 24 commenters note that JBI notifies police and firefighting authorities before lift operations begin.

Other comments relate to the general efficiency in cost and time of using a helicopter for lift operations. Forty-six commenters assert that the cost of using a helicopter is much less than the cost of using alternative methods to lift objects because of the speed at which a helicopter can perform certain tasks. Nine commenters indicate that, because of the time necessary to transport and set up a crane, using a crane may require several days to complete a task that a helicopter can complete in several minutes.

Regarding the necessity of using the Huey, 17 commenters state that a Huey (versus other helicopters) is necessary to complete certain tasks because of its lifting capability. Of those 17 commenters, several state that they want the option of using a Huey if needed. In addition, one commenter states that JBI operates the only Huey in that region, and another commenter states that he would rather use a Huey "to do a roof top job with ease" instead of a Bell 206 helicopter, which would operate at its maximum lift capability.

Three commenters state restricted-category Hueys should not be operated differently than civilian helicopters, and two commenters note that the Government operates restricted-category helicopters. Similarly, four commenters state that when former military aircraft are maintained properly, those aircraft are as reliable as their civilian counterparts. Several commenters indicate that an operator should be evaluated on the safety of its operations, not the certification requirements of the aircraft it operates.

One commenter opposes a grant of exemption because the "restricted category accident rate does not compare" with that of the normal category accident rate. In addition, the commenter states that operators that "go to the expense" to use normal-category rotorcraft would face a severe hardship, and the public would realize a compromise of safe operating practices if restricted-category rotorcraft are allowed to operate over densely populated areas.

The FAA's analysis/summary is as follows:

The FAA has considered the petitioner's supporting information as well as the information provided by comments submitted to the Federal Register supporting and opposing JBI's petition and finds that a grant of exemption would not be appropriate.

The FAA recognizes that the operations proposed by the petitioner are limited in scope. The petitioner does not request authorization to operate its restricted-category helicopter over congested areas in general, but for specific external-load operations only. For such operations, the petitioner proposes stringent requirements to limit the

scope of operations to be conducted under the exemption to ensure an equivalent level of safety is maintained.

After careful consideration of the petitioner's arguments, the FAA finds at this time that granting relief to permit JBI to conduct operations in a restricted-category helicopter over a densely populated area, in a congested airway, or near a busy airport where passenger transport operations are conducted could pose a hazard to persons or property on the surface. Although JBI states that it would operate under an approved CAP, JBI cannot ensure an equivalent level of safety will be maintained with a rotorcraft not type certificated under part 27 or part 29. The civil rotorcraft certification process itself provides the FAA with a measure of the level of safety such an aircraft possesses. In contrast, the petitioner's restricted-category helicopter did not undergo such a process and thus, the FAA is not convinced that an equivalent level of safety can be achieved. Accordingly, relief from Sections 133.33(d) and (e) and 133.45(d) is denied.

Further, the FAA finds that the issue effectively raised by your petition for exemption is whether holders of a rotorcraft external-load operator certificate should be permitted to conduct external-load operations over congested areas in rotorcraft type certificated in the restricted category under Section 21.25, an issue more appropriately considered by the general rulemaking process. The general rulemaking process provides the FAA an opportunity to obtain comments from a much larger segment of the aviation industry, the public, other Government agencies, as well as from within the FAA, thereby presenting issues to a much broader audience. Permitting restricted-category helicopters to conduct external-load operations over congested areas, for any reason and length of time, is a question of safety and must be addressed with the thoroughness provided by general rulemaking. The FAA wants to allow the aircraft industry, other Government agencies, helicopter manufacturers and operators, and members of the interested general public an opportunity to comment and provide arguments and data on these subjects in a general rulemaking setting.

Finally, the FAA notes that a company specializing in helicopter construction lift operations petitioned to amend Sections 133.33(d) and 133.45(d) based on circumstances similar to those presented by you in your petition for exemption. The FAA has placed that petitioner's comments and arguments for a rule change in a data base that will be reviewed when the FAA considers general rulemaking on this issue.

In consideration of the foregoing, I find that a grant of

exemption would not be in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. Sections 40113 and 44701, delegated to me by the Administrator (14 CFR Section 11.53), the petition of Joe Brigham, Inc., for an exemption from 14 CFR Sections 133.33(d) and (e) and 133.45(d) is hereby denied.

Issued in Washington, DC, on July 30, 1999.

/s/ L. Nicholas Lacey
Director, Flight Standards Service